



October 20, 2021

Adam Howell
Clean Water Act Section
U.S. EPA, Region
975 Hawthorne Street
San Francisco, CA 94105-3901

**Re: Follow-Up to 5-day report for Pipeline P00547 10-2-21 spill
Platforms Ellen, Elly, and Eureka NPDES Permit CAG280000**

Dear Mr. Howell:

We write in response to your email dated October 18, 2021 seeking (1) additional information, including information regarding the estimated volume of the spill and how Amplify arrived at that number as well as (2) a site map identifying where the leak occurred.

Turning to your first request, the estimated spill volume was calculated as 588 barrels using the flow meters located offshore on Elly Platform and the integrity meter located onshore at Beta Station. Attached as Appendix A are the tickets from Beta Offshore's ticketing system used in the ordinary course of business to track volumes of oil produced and to invoice Beta Offshore's customers and for inventory control. That ticketing system collects flow data each day at 7:00 am PST. The estimated spill volume for this incident was calculated by reviewing the tickets reflecting the time period from October 1 at 7:00 am PST through October 2 at 7:00 am PST. Beta Offshore's system reports both Gross Barrels of Oil and Net Barrels of Oil. The Net Barrels of Oil includes average temperature and pressure at the flow meters. The below outlines the calculation resulting in 588 barrels.

<u>PAM A Net Barrel</u>	<u>PAM B Net Barrel</u>	<u>Beta Station Net Barrel</u>
3,361.87	597.93	3,371.6

The PAM A and PAM B Net Barrel values are added together to reflect the volume that flowed off the Elly Platform from 0700 on October 1 to 0700 on October 2.

$$3,361.87 + 597.93 = 3,959.8 \text{ barrels}$$

The Beta Station Barrel is then subtracted from the total PAM A + PAM B to result in 588.2 barrels.

$$3,959.8 - 3,371.6 = 588.2 \text{ barrels}$$

This estimated 588 barrel calculation was shared with various constituents at the Unified Command, including PHMSA, NTSB, the Coast Guard and California Department of Fish and Wildlife - OSPR. Upon review, the Coast Guard noted publicly that they have a high degree of confidence that the spill amount is approximately 588 barrels.

On the second issue raised in your email, we are attaching an excerpt from Beta Offshore's Oil Spill Response Plan showing the Beta Offshore facilities. We are also collecting additional maps that identify

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the currently understood area of interest and will provide those maps tomorrow. We note that Unified Command and various agencies have begun making maps, images and data available at various publicly accessible locations, including:

- NOAA Environmental Response Management Application:
<https://erma.noaa.gov/southwest#/layers=15+48329+48331+48423+48452+48462+48526+48525+48506+48569+48575&x=-117.90369&y=33.44129&z=10.4&clean=1&panel=legend>
- NASA Earth Observatory: <https://earthobservatory.nasa.gov/images/148929/satellites-view-california-oil-spill>
- U.S. Coast Guard images:
[https://www.dvidshub.net/search/?q=&filter%5Bbranch%5D=Coast+Guard&filter%5Bstate%5D=California&view=grid&filter\[date\]=20211003-20211019](https://www.dvidshub.net/search/?q=&filter%5Bbranch%5D=Coast+Guard&filter%5Bstate%5D=California&view=grid&filter[date]=20211003-20211019)
- U.S. Coast Guard overflight images: <https://www.dvidshub.net/image/6870875/unified-command-continues-response-oil-spill-off-newport-beach>

As you know, there are multiple ongoing investigations regarding the events and timeline around the spill. At this time, those investigations are ongoing and Amplify will supplement its submission as those investigations proceed. Amplify is committed to working cooperatively with the EPA and all agencies investigating this matter.

Sincerely,

Diana Lang

Diana Lang
HSE Manager

cc (via email): Eric Magnan (magnan.eric@epa.gov)



Operator or Field Location

Beta Sta. Integrity Meter

Ticket # 1

Lease or Company Name

San Pedro Bay Pipeline/Beta Offshore

BS & W
0.000

AVG. TEMP
74.0

AVG. PSI
5.5

GRAVITY @ 60
15.2

Obs. 15.2@60.0

S&W FACTOR
1.0000

CTL
0.9949

CPL
1.0000

MTR. FACTOR
0.98830

Meter Temp. Compensated ---- NO

CLOSING METER READING

880733.0

OPENING METER READING

877304.0

METERED AMOUNT

3429

COMBINED CORRECTION FACTOR

0.9833

TOTAL GROSS BARRELS

3371.60

BS & W FACTOR

1.0000

BS & W AMOUNT

0.00

TOTAL NET BARRELS OF OIL

3371.60

Opening Gauger:

Rick Armstrong

10/1/2021 @ 0700

Witness:

Closing Gauger:

Rick Armstrong

10/2/2021 @ 0700

Witness:

Comments:



Operator or Field Location

Elly PAM A

Ticket # A 10/1/2021

Lease or Company Name

San Pedro Bay Pipeline

BS & W

0.00

AVG. TEMP

184.0

AVG. PSI

563.0

GRAVITY @ 60

15.2

Obs. 15.2 @ 60.0

S&W FACTOR

1.0000

CTL

0.9540

CPL

1.0029

MTR. FACTOR

0.9988

CLOSING METER READING

61747

OPENING METER READING

58229

METERED AMOUNT

3518

COMBINED CORRECTION FACTOR

0.9556

TOTAL GROSS BARRELS

3361.87

BS & W FACTOR

1.0000

BS & W AMOUNT

0.00

TOTAL NET BARRELS OF OIL

3361.87

Opening Gauger:

Rick Armstrong

10/1/2021 @ 0700

Witness:

Closing Gauger:

Rick Armstrong

10/2/2021 @ 0700

Witness:

Comment:



Operator or Field Location

Elly PAM B

Ticket # B 10/2/2021

Lease or Company Name

San Pedro Bay Pipeline**BS & W****0.00****AVG. TEMP****155.0****AVG. PSI****446.0****GRAVITY @ 60****15.1**

Obs. 14.9 @ 60.0

S&W FACTOR**1.0000****CTL****0.9649****CPL****1.0021****MTR. FACTOR****0.9990****CLOSING METER READING****478989****OPENING METER READING****478370****METERED AMOUNT****619****COMBINED CORRECTION FACTOR****0.9660****TOTAL GROSS BARRELS****597.93****BS & W FACTOR****1.0000****BS & W AMOUNT****0.00****TOTAL NET BARRELS OF OIL****597.93****Opening Gauger:****Rick Armstrong****10/1/2021 @ 0700****Witness:****Closing Gauger:****Rick Armstrong****10/2/2021 @ 0700****Witness:****Comment:**



Operator or Field Location

Beta Sta. Integrity Meter

Ticket # 1

Lease or Company Name

San Pedro Bay Pipeline/Beta Offshore

BS & W
0.000

AVG. TEMP
74.0

AVG. PSI
5.5

GRAVITY @ 60
15.2

Obs. 15.2@60.0

S&W FACTOR
1.0000

CTL
0.9949

CPL
1.0000

MTR. FACTOR
0.98830

Meter Temp. Compensated ---- NO

CLOSING METER READING

880733.0

OPENING METER READING

877304.0

METERED AMOUNT

3429

COMBINED CORRECTION FACTOR

0.9833

TOTAL GROSS BARRELS

3371.60

BS & W FACTOR

1.0000

BS & W AMOUNT

0.00

TOTAL NET BARRELS OF OIL

3371.60

Opening Gauger:

Rick Armstrong

10/1/2021 @ 0700

Witness:

Closing Gauger:

Rick Armstrong

10/2/2021 @ 0700

Witness:

Comments:



Operator or Field Location

Lease or Company Name

Elly PAM A
San Pedro Bay Pipeline

Ticket # A 10/1/2021

BS & W	AVG. TEMP	AVG. PSI	GRAVITY @ 60
0.00	184.0	563.0	15.2
			Obs. 15.2 @ 60.0
S&W FACTOR	CTL	CPL	MTR. FACTOR
1.0000	0.9540	1.0029	0.9988

CLOSING METER READING	61747
OPENING METER READING	58229
METERED AMOUNT	3518

COMBINED CORRECTION FACTOR	0.9556
TOTAL GROSS BARRELS	3361.87

BS & W FACTOR	1.0000
BS & W AMOUNT	0.00
TOTAL NET BARRELS OF OIL	3361.87

Opening Gauger: Rick Armstrong 10/1/2021 @ 0700

Witness: _____

Closing Gauger: Rick Armstrong 10/2/2021 @ 0700

Witness: _____

Comment:



Operator or Field Location

Lease or Company Name

Elly PAM B
San Pedro Bay Pipeline

Ticket # B 10/2/2021

BS & W	AVG. TEMP	AVG. PSI	GRAVITY @ 60
0.00	155.0	446.0	15.1
			Obs. 14.9 @ 60.0
S&W FACTOR	CTL	CPL	MTR. FACTOR
1.0000	0.9649	1.0021	0.9990

CLOSING METER READING	478989
OPENING METER READING	478370
METERED AMOUNT	619

COMBINED CORRECTION FACTOR	0.9660
TOTAL GROSS BARRELS	597.93

BS & W FACTOR	1.0000
BS & W AMOUNT	0.00
TOTAL NET BARRELS OF OIL	597.93

Opening Gauger: Rick Armstrong 10/1/2021 @ 0700

Witness: _____

Closing Gauger: Rick Armstrong 10/2/2021 @ 0700

Witness: _____

Comment:

BETA OFFSHORE
BETA PUMP STATION
Daily Report

Date : 02/10/21 Time : 07:00:00 Computer ID: BETA Rev: 20.74.30-F108

Meter ID Number	Integrit	LACT #2	LACT #3
Product Number	1	1	1
Product ID	CRUDE	CRUDE	CRUDE
API Table Selected	Table A	Table A	Table A
Day Start Date	01/10/21	01/10/21	01/10/21
Day Start Time	07:00:00	07:00:00	07:00:00
Day End Date	02/10/21	02/10/21	02/10/21
Day End Time	07:00:00	07:00:00	07:00:00

Daily G(IV) BBL	3428.752	.000	4486.060
Daily N(GSV) BBL	3371.192	.000	4715.403
Daily Mass KLB	0	0	0

Opening G(IV) BBL	877303.805	519750.282	743145.240
Opening N(GSV) BBL	522176.369	525773.436	872565.310
Opening Mass KLB	0	0	0

Closing G(IV) BBL	880732.557	519750.282	747631.300
Closing N(GSV) BBL	525547.561	525773.436	877280.714
Closing Mass KLB	0	0	0

Daily Flow Weighted Averages :

Temperature Deg.F	74.0	.0	77.6
Pressure PSIG	5.5	.0	338.6
Flowing Den GM/CC	.0000	.0000	.0000
Density T Deg.F	74.0	.0	77.6
Density Pres PSIG	5.5	.0	338.6
Flowing Sp. Gr.	.0000	.0000	.0000
Sp. Gr. @ 60 Deg.F	.9652	.0000	.9652
API @ 60 Deg.F	15.1	.0	15.1
VCF	.99485	.00000	.99354
CPL	1.00002	.00000	1.00133
Meter Factor	.98828	.00000	1.05655
K Factor	1024.0	.0	1024.0

MF Used In Net (GSV)	YES	YES	YES
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**Indicate a "Totalizer Rollover"

3372

PAN A + B = 3960

BETA STA 3372

DELTA 586 bbls

BETA OFFSHORE
PLATFORM ELLY

Daily Report

Date : 02/10/21 Time : 07:00:00 Computer ID: Rev:20.74.30-F100

Meter ID Number	PAM A	PAM B	LD METER
Product Number	1	1	1
Product ID	CRUDE	CRUDE	CRUDE
API Table Selected	Table A	Table A	Table A
Day Start Date	01/10/21	01/10/21	01/10/21
Day Start Time	07:00:00	07:00:00	07:00:00
Day End Date	02/10/21	02/10/21	02/10/21
Day End Time	07:00:00	07:00:00	07:00:00

Daily G(IV) BBL	3510.268	618.528	.000
Daily N(GSV) BBL	3361.150	597.804	.000
Daily Mass KLB	0	0	0

Opening G(IV) BBL	58229.084	478370.087	.000
Opening N(GSV) BBL	425908.266	156064.900	.000
Opening Mass KLB	0	0	0

Closing G(IV) BBL	61747.352	478998.615	.000
Closing N(GSV) BBL	429269.416	156662.704	.000
Closing Mass KLB	0	0	0

Daily Flow Weighted Averages :

Temperature Deg.F	104.1	155.1	.0
Pressure PSIG	563.4	445.9	.0
Flowing Den GM/CC	.0000	.0000	.0000
Density T Deg.F	104.1	155.1	.0
Density Pres PSIG	563.4	445.9	.0
Flowing Sp. Gr.	.0000	.0000	.0000
Sp. Gr. @60 Deg.F	.9626	.9626	.0000
API @ 60 Deg.F	15.5	15.5	.0
VCF	.9537	.9646	.0000
CPL	1.0030	1.0022	.0000
Meter Factor	.9988	.9990	.0000
K Factor	8400.0	8400.0	.0

MF Used In Net (GSV)	YES	YES	YES
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**Indicate a "Totalizer Rollover"

3362

598

BETA OFFSHORE
BETA PUMP STATION
Daily Report

Date : 01/10/21 Time : 07:00:00 Computer ID: BETA Rev: 20.74.30-F100

Meter ID Number	Integrit	LACT #2	LACT #3
Product Number	1	1	1
Product ID	CRUDE	CRUDE	CRUDE
API Table Selected	Table A	Table A	Table A
Day Start Date	30/09/21	30/09/21	30/09/21
Day Start Time	07:00:00	07:00:00	07:00:00
Day End Date	01/10/21	01/10/21	01/10/21
Day End Time	07:00:00	07:00:00	07:00:00

Daily G (IV) BBL	4826.343	.000	4438.281
Daily N (GSV) BBL	4746.596	.000	4667.806
Daily Mass KLB	0	0	0
Opening G (IV) BBL	872477.462	519750.282	738706.959
Opening N (GSV) BBL	517429.773	525773.436	867897.504
Opening Mass KLB	0	0	0
Closing G (IV) BBL	877303.805	519750.282	743145.240
Closing N (GSV) BBL	522176.369	525773.436	872565.310
Closing Mass KLB	0	0	0

Daily Flow Weighted Averages :

Temperature Deg.F	73.3	.0	77.8
Pressure PSIG	6.1	.0	499.4
Flowing Den GM/CC	.0000	.0000	.0000
Density T Deg.F	73.3	.0	77.8
Density Pres PSIG	6.1	.0	499.4
Flowing Sp. Gr.	.0000	.0000	.0000
Sp. Gr. @ 60 Deg.F	.9652	.0000	.9652
API @ 60 Deg.F	15.1	.0	15.1
VCF	.99512	.00000	.99347
CPL	1.00002	.00000	1.00197
Meter Factor	.99828	.00000	1.00635
K Factor	1024.0	.0	1024.0

MF Used In Net (GSV)	YES	YES	YES
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**Indicate a "Totalizer Rollover"

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BETA OFFSHORE
PLATFORM ELLY

Daily Report

Date : 01/10/21 Time : 07:00:00 Computer ID: Rev:20.74.30-F108

Meter ID Number	PAM A	PAM B	LD METER
Product Number	1	1	1
Product ID	CRUDE	CRUDE	CRUDE
API TableSelected	Table A	Table A	Table A
Day Start Date	30/09/21	30/09/21	30/09/21
Day Start Time	07:00:00	07:00:00	07:00:00
Day End Date	01/10/21	01/10/21	01/10/21
Day End Time	07:00:00	07:00:00	07:00:00

Daily G(IV) BBL	4974.397	.000	.000
Daily N(GSV) BBL	4734.463	.000	.000
Daily Mass KLB	0	0	0

Opening G(IV) BBL	53254.687	478370.087	.000
Opening N(GSV) BBL	421173.803	156064.900	.000
Opening Mass KLB	0	0	0

Closing G(IV) BBL	58229.004	478370.087	.000
Closing N(GSV) BBL	425908.266	156064.900	.000
Closing Mass KLB	0	0	0

Daily Flow Weighted Averages :

Temperature Deg.F	192.6	.0	.0
Pressure PSIG	486.4	.0	.0
Flowing Den CM/CC	.0000	.0000	.0000
Density T Deg.F	192.6	.0	.0
Density Pres PSIG	486.4	.0	.0
Flowing Sp. Gr.	.0000	.0000	.0000
Sp. Gr. @60 Deg.F	.9626	.0000	.0000
API @ 60 Deg.F	15.5	.0	.0
VCF	.9504	.0000	.0000
CPL	1.0026	.0000	.0000
Meter Factor	.9988	.0000	.0000
K Factor	8400.0	.0	.0

MF UsedInNet (GSV)	YES	YES	YES
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**Indicate a "Totalizer Rollover"

3362

WITT|O'BRIEN'S

Map Prepared By: Wm O'Brien's
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Area Map

